CAMPAIGN DELIVERY AND VIEWABLE IMPRESSIONS: THE NEW NORMAL

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Introduction

Historically, the assumption in assessing digital advertising campaigns has been that 100% of the impressions that have been served—and paid for-- are seen by the target audience. This has never been a realistic expectation. New campaign measurement tools that track the demographics of the exposed audience, and that measure whether or not served impressions are actually in view, force buyers and sellers to revisit such assumptions—about what percent of impressions are actually delivered against the target audience; and, what percent of delivered impressions are actually viewable.

What the industry needs, then, is an understanding of context, of what reasonable expectations might be for assessing campaign performance. What is a reasonable expectation for campaign delivery with respect to share of impressions that are delivered, in view, and to the target demographic? What is average? What is good? This is especially important for publishers of high quality, differentiated, branded content (such as magazine publishers), whose inventory generally performs better than average.

comScore's Validated Campaign Essentials (vCE) is a tool for measuring digital campaign performance with respect to, among other things, demographic composition and Viewability. After one year and over 4,000 campaigns, comScore is now able to provide normative data on campaign performance.

In this paper, the authors will (briefly) walk through a recent history of events in the US digital marketplace that have led to a tripartite industry consensus about the importance of measuring advertising campaigns with respect to viewable, as opposed to served, impressions; and, with respect to campaign delivery against the target demographic, as expressed in terms of reach, frequency, and Gross Ratings Points (GRPs.) Then the authors will share some data culled from thousands of campaigns tracked via comScore's vCE offering, on normative campaign performance with respect to percent of impressions delivered that were viewable ("% in-view"); and, percent of impressions delivered against target demographic ("% in-target.") These findings should be helpful to both buyers and sellers in understanding what reasonable expectations might be for campaign performance.

We would like to offer an important note about the impact of these findings. Evaluating campaign delivery based on viewable impressions, and against a reasonable reporting of in-target delivery, may cause some temporary discomfort for constituencies comprising the digital advertising ecosystem. But we believe that these changes will only serve to make Internet advertising better. And both buyers and sellers know how well Internet advertising already works (we would provide citations here, but a quick search of the WARC data base against the term "Internet Advertising Effectiveness" yields 400 results.) So while a change in currency, *a priori*, leads to a change in pricing, and thus some near-term chaos, we wish to stress that the net effect of these "course corrections" should be an advertiser base willing to spend more money in digital, to better effect-- a tide against which all boats ought to rise, with the possible exception of some bad actors.

Finally, we should stress that as a measurement practitioner, it is not the place of comScore to dictate how the industry transacts business. Rather, it is our place to support how business is done, by developing measurement services that enable commerce. As we will see below, it is the Making Measurement Make Sense initiative that has called for a change in currency.

Making Measurement Make Sense

In 2011 the US Interactive Advertising Bureau (IAB), the trade association of digital publishers, launched an initiative called Making Measurement Make Sense, which is commonly referred to as "3MS." 3MS quickly became a tripartite initiative, under the auspices of the IAB, the Association of National Advertisers (ANA), and the American Association of Advertising Agencies (AAAA, commonly referred to as the 4As.) In the first phase of 3MS, the initiative's consultant, Bain, conducted over 100 interviews with key stakeholders from across the digital advertising ecosystem. The result of that effort was the publication of five core, guiding principles for digital measurement.[1] Particularly germane to this paper are the first two principles:

> ***Principle #1 – Move to a "viewable impressions" standard and count real exposures online.***
> *Today we count "served impressions" as recorded by ad servers. Often, ad units are not in a viewable space to the end-user or fail to fully load on the screen – potentially resulting in substantial over-counting of impressions. Viewable exposures are increasingly the norm across other media and better address the needs of brand marketers.*

[1] http://www.iab.net/mmms

> ***Principle #2 – Online advertising must migrate to a currency based on audience impressions, not gross ad impressions.***
> *Brand marketers target specific audiences. Marketers need to understand the quality and number of exposures against their targets – and the respective reach and frequency of such exposures. The existing digital currency makes this extremely difficult. Moreover, the practice of selling ad impressions makes cross-media comparisons extremely difficult, if not impossible.*[2]

3MS was doing nothing less than calling for a change in the currency upon which digital advertising is transacted. Such a change will inevitably have a profound impact on the buyers and sellers of digital advertising.

Viewability
Over the past 5 or 6 years, numerous companies emerged in the nascent digital ad verification space. One of the primary metrics in this space is viewability—did the ad that was served actually make it onto the user's screen? Historically, for a number of reasons, a served ad impression might not actually render as viewable on the user side. Maybe the user navigated off the page before the ad loaded. Maybe the ad was served as the result of fraudulent, or non-human, activity. Maybe the ad was served "below the fold"—that is, to a place on the page that does not appear on the user's screen; if the user never scrolls down to the place the ad is located, the ad cannot be viewed. In these cases the ad server will log an ad impression served, and the advertiser will likely be charged, even though the impression did not ever generate a consumer's "opportunity to see" (OTS) the ad.

One undercurrent that is worth at least noting, but which we do not intend to explore herein, is the phenomenon of Non-Human Traffic (NHT), some of which might be labeled as fraudulent traffic. Across the digital ecosystem, an alarming share of measured impressions are fraudulent. While an exploration of the nature of fraudulent traffic is beyond the scope of this paper, the reader should be aware that Non-Human Traffic is a material driver of served ad impressions that are ultimately deemed not viewable. We would refer the interested reader to two posts on the topic, written by Brian Pugh, comScore's Senior Vice President, Audience, which may be found on the comScore blog:

Staying Ahead of Invalid Traffic in Digital Audience Measurement; July 11, 2011;
http://www.comscore.com/Insights/Blog/Staying_Ahead_of_Invalid_Traffic_in_Digital_Audience_Measurement

Battling Bots: comScore's Ongoing Efforts to Detect and Remove Non-Human Traffic; October 11, 2012;
http://www.comscore.com/Insights/Blog/Battling_Bots_comScores_Ongoing_Efforts_to_Detect_and_Remove_Non_Human_Traffic

Viewability Defined
The first logical question that arises in considering ad viewability is, naturally, what constitutes "viewable"? The 3MS initiative has established what is probably best characterized as a straw man working standard for display ad viewability. That working standard is that, for a served impression to be considered viewable, at least 50% of the pixels of the ad must be on the user's screen for at least one consecutive second. This definition may be modified or enhanced, but for now it has become the *de facto* industry standard. comScore has adopted this definition, and the data shown herein are based on this definition.

Percent Delivery In-target
The second 3MS principal states, "*Online advertising must migrate to a currency based on audience impressions, not gross ad impressions.*" This refers to a change from transactions based on total impressions, to transactions based on specific audience targets, such as traditional media buying demographic age/sex targets. Digital media have generally been positioned as highly targeted, either based on context, or on demographic and other more granular targeting characteristics encoded in cookies associated with the browser into which the ad is to be served. So the assumption has been that the gross sum of impressions delivered either by contextual or cookie targeting, should be assumed to be in target.

On the one hand, a move to broad, "TV-style" targets may be seen as blunting the edge of digital targetability. But the flip side is that it is precisely the pool of TV ad dollars that 3MS is designed to draw into digital media, by making digital more hospitable to the very largest brand advertisers.

Once campaigns are articulated in terms of such targets, the total number of impressions delivered against that target may be tracked and expressed with respect to traditional media metrics—Gross Ratings Points, Target Ratings Points, Reach, and Frequency, all at the campaign level.

comScore has been offering a service to track and evaluate campaign delivery against such demographic targets since 2010. This service was originally called Campaign Essentials; with the incorporation of a suite of ad verification services in the second half of 2011 (including, as noted above, viewability), the service became known as vCE, or Validated Campaign Essentials.

By analyzing thousands of campaigns instrumented for vCE tracking, comScore has been able to develop normative data with respect to campaign performance for both percent of impressions delivered against the target demographics and percent of impressions that are viewable.

[2] http://www.iab.net/mmms

Developing Normative Data
As the digital ecosystem moves toward adopting the principals of 3MS, buyers and sellers need to understand what to expect with respect to campaign delivery. Toward this end, comScore has been working on development of a normative database, and on models to generate relevant norms using those data.

To inform our norms, comScore collected data on thousands of vCE projects over the course of a year, from July 2012 through June 2013. First, the data were cleaned and then scrubbed to exclude overlapping campaigns and test data. To construct our norms, we employed a regression methodology including captured data (e.g. impression volume, project length, etc.) and meta-data including information such as the industry type of the ad campaign (e.g. auto, consumer goods, travel, etc.), whether the project was part of a super-campaign, primary targets, and so on.

There are a variety of advantages to using regression methodology over the more typical weighted averages often used in the industry. First, this methodology allows us to look at the effect of each campaign attribute while holding constant the effect of all other attributes. For example, in the model that generates the norm for unique viewers of the ads, we can look at the effect of project length holding constant the effect of PC impressions, ad type and so on. Similarly, we can look at the effect of PC impressions holding constant project length. Another major advantage of the regression approach is that it allows us to use all of our data simultaneously rather than having to segment. This gives our norms both better precision and more breadth. It would be challenging to find enough data if we were to try to construct a norm for campaigns that were no more than 30 days long, up to 100,000,000 impressions, and advertising automobiles. With the models generated by the regression, we are able to create very precise norms for virtually any combination of campaign attributes.

Caveats
Before presenting the data, some caveats are in order.

- ***The universe of campaigns:*** The universe of campaigns considered in this analysis is defined based on those campaigns that publishers, advertisers, or agencies have commissioned comScore to track with vCE. This may or may not be representative of all campaigns.

- ***Computer-based Display ads:*** The analysis herein is limited to display advertising delivered via computer. Mobile advertising is excluded, and and video advertising is included in the "% in-target" norms but not in the Viewability norms, because to date here is no working standard for defining video viewability.

- ***Methodology:*** comScore is in the process of rolling out a second iteration of vCE, known as vCE 2.0. The first generation of vCE uses the comScore panel exclusively to evaluate the demographic delivery of campaigns. Version 2.0 incorporates cookie-level demographics from third party partners, and is being phased in beginning in July 2013, so after the range of campaigns in the accompanying normative analysis. It is possible that the demographic reportage of campaign delivery might change based on vCE 2.0 (although the change should not affect viewability).

- ***Target selection versus target execution:*** comScore knows the demographic target of the campaign based on the target input into the user interface by the purchaser of the campaign analysis. It is possible that the campaign in question has not in fact been executed against the designated target; for example, an advertiser may have chosen to look at delivery against women 18-49, without having optimized the buy to deliver against that demographic. This tends to bring down reported % in-target, to the extent that the buy wasn't actually executed against and optimized for the target against which it ends up assigned in the normative database.

- ***Geography:*** This analysis is limited to campaigns run in the US. Results in other countries may well be different.

- ***Pre-release:*** Finally, it should be noted that the norms presented herein are from a model that has not yet been released. It is possible that the reported norms will change somewhat prior to official release.

Percent Delivery in-target
The "Percent delivery in-target" metric is an impression-based metric—what share of all impressions delivered, were delivered against the target in question? In looking at the campaigns available in the normative database, we limited this analysis to target demographics that were associated with at least 30 campaigns.

In the table below, we present results from the comScore campaign norms model and database, showing the percent delivered against the designated target ("% in-target") for each demographic target in the database against which we were able to identify at least 30 campaigns. The first column of the table shows the target, the second shows the number of campaigns. The third shows the percent of impressions that were delivered against the designated target, generated by the normative model.

In order to provide context to these percentages, in column four we show the percent of the digital universe that each designated target comprises. The analysis is limited to computer-based impressions, so this is the comScore Media Metrix universe—the share that each target comprises of total persons 2+ who have accessed the Internet from a home-owned or a work-owned computer in the past 30 days. Note though that the campaigns were run between July 2012 and June 2013, while

the universe estimates shown are from August 2013. However, these figures don't change much month to month, and for comparing normative performance against universe this is sufficient for illustrative purposes.

Finally, the last column shows the "% in-target" indexed against the share of universe. So for example, the normative % in-target for campaigns targeting women 18-49 is 41% (41% of impressions were delivered against this target), whereas the target comprises 25.7% of the universe, for an index of 160.

Table 1: % In-Target Norms for Targets Associated With at Least 30 Measured Campaigns
July 2012 Through July 2013

Target	Cases	vCE Norm: % In-Target	Share of Universe	vCE efficiency Index
OVERALL		41.1%		
Women 18-49	1056	41.0%	25.7%	160
Women 25-54	554	34.3%	24.2%	142
Adults 18-49	456	70.2%	50.0%	140
Adults 25-54	443	47.0%	46.6%	101
Adults 25-54; HHI $75K+	171	23.7%	22.2%	107
Adults 18-34	123	51.3%	26.8%	191
Adults 25-49	101	53.4%	38.7%	138
Men 18-34	92	40.6%	13.4%	303
Women 25-44 With Kids	73	18.0%	7.7%	234
Adults 35-64	70	29.8%	43.7%	68
Women 25-49	69	37.5%	20.1%	187
Women 18-34	66	31.8%	13.5%	235
Women 18-49; Hispanic	60	14.3%	3.8%	376
Men 18-34; Hispanic	58	13.9%	2.1%	662
Women 35-54	46	27.1%	16.4%	165
Teens 12-17	46	24.6%	9.6%	256
Women 18-49; with Kids	43	27.9%	12.5%	223
Men 18-49	43	50.3%	24.3%	207
Males 25-54	38	33.8%	22.4%	151
Women 25-54; with Kids	37	21.2%	11.6%	183
Women 18-49; Hispanic; with kids	37	1.2%	2.0%	60
Women 18-54	31	37.8%	29.8%	127
Men 21-34	30	32.3%	11.3%	286

The reader will note that, paradoxically, campaigns targeting smaller, more discrete targets seem to have far better performance with respect to share of impressions against the demographic target, relative to universe. For example, the normative percent in-target for campaigns targeting Hispanic males 18-34 is 13.9%, while this cell accounts for only 2.1% of the Computer Internet-accessing universe—an index of 662. We believe that this is a reflection of the fact that campaigns against narrower targets are actually planned and executed in a more highly targeted fashion, and the higher indices reflect that execution. Advertisers targeting broader demographics may simply be buying general interest websites with the appropriate age and gender skew, but not necessarily using strategies to guarantee demographic delivery. In addition these advertisers may be optimizing on some other characteristic entirely—say, likely product purchasers—and then after the fact evaluating delivery against a demographic target.

The authors believe that, while the figures for % in-target fall far short of 100%, they still underscore the unique targetability of digital advertising. The efficiencies with which impressions are delivered against target cells are generally quite high, and for the narrower, niche cells, they are generally extremely high. As the 3MS initiative and the principals it espouses receive widespread adoption, we expect to see buyers and sellers continue to align their businesses around such demographic targetability—not in place of the more discrete and behavioral-based targeting the Internet can provide, but in addition to it. And finally, we expect that vCE and other campaign evaluation tools will evolve to be able to report on discrete, complex targets combining behavioral targeting with demographic targeting; i.e., women 25-54 who plan to buy a new car. Such measures will present the unique targetability of digital in it's best light.

Viewability
At this point, we are able to provide normative viewability data by advertiser category. While we understand that media type is perhaps the most interesting variable to analyze—what publisher types have the best viewability performance—currently the data input into the norms model isn't coded at that level. However, the reader might make informed inferences about media types based on a working knowledge of the different types of placements that campaigns in different categories might typically use.

Table 2: Viewability Norms (% In-View) By Campaign Advertiser Category

Norm for Overall	**45.8%**
Norm for Auto	40.2%
Norm for Computers & Technology	46.7%
Norm for Consumer Goods	47.0%
Norm for Finance	40.0%
Norm for Health	47.8%
Norms for Media + Online & Entertainment	46.3%
Norms for Retail	45.1%
Norm for Telecommunications	36.1%
Norm for Travel	49.4%
Norm for Other Categories	46.9%

It is important to stress that the concept of Viewability is still relatively new and still evolving in the advertising buy/sell process. Publishers have only been operating in the age of viewability for a relatively short time. Indeed, given the fact the in the US the Media Rating Council (MRC) has issued a "Viewable Impression Advisory,"[3] one might conceivably argue that the age of viewability hasn't really begun yet. We expect to see publishers deploying new and innovative strategies to optimize on viewability, finding new and creative ways to integrate content and advertising in order to maximize the experience for both the consumer and the advertiser.

Second, an analysis of the share of ads that are viewable doesn't reflect the share of dollars spent on viewable ads. In previous comScore analyses, we documented that premium, branded content tends to generate high viewability, whereas so-called remnant advertising that ends up sold on blind exchanges tends to be the poorer-performing inventory. The latter generally commands a price point far below the former. We believe that with respect to branding advertising (as opposed to Direct Response advertising, where the advertiser is typically billed only for some generated activity and not for views), the majority of the adspend is already against viewable ads. And as the notion of viewability filters through the ecosystem, this share will continue to increase. Data on viewability performance will help both buyers and sellers to value placements differentially based on the likelihood of generating an opportunity to see, which is to everyone's benefit.

In Conclusion
When 3MS called for a shift in the digital currency to viewable impressions, and to transacting based on audience targets as opposed to gross impressions, the earth shook. Buyers and sellers became aware that the medium of Internet advertising was entering a new, more mature era, one in which digital advertising could, and would, compete more aggressively for TV advertising dollars.

Such a change will not come without growing pains.

In this paper we have presented some normative data from comScore's Validated Campaign Essentials product, culled from several thousand campaigns across a full year. We've shown that digital campaigns can deliver in a highly efficient manner against demographic targets. Indeed we believe that this targetability is, if anything, understated in the analysis we presented because of the deployment of targeting strategies and executions that may not be manifest in the data we are able to track.

We also shared some preliminary normative data on viewability. We believe that it will be important to see how campaign performance against viewability improves over time, as both buyers and sellers begin to optimize against data on placement-level viewability performance. And, we caution that the share of ads that are classified as viewable should not be seen as a surrogate for the share of ad dollars that are spent against viewable impressions, because premium branded content that commands a higher price point tends to perform far better on viewability measures than remnant inventory.

[3] http://www.iab.net/media/file/VIEWABLE-IMPRESSION-ADVISORYfinal.pdf